Tab B Return on Investment Program Funding Application for FY 2013

Contact Information:

Funding to be requested (select only one):

_x_ IT Enterprise Solution project

___ Agency Specific IT project

Date: August 31, 2011

Agency Name: DAS/ITE

Project Name: Enterprise Licensing Portal

Agency Manager: Mark Uhrin

Agency Manager Phone Number / E-Mail: 515-281-5818; mark.uhrin@iowa.gov

Executive Sponsor (Agency Director or Designee): Lorrie Tritch, COO DAS/ITE

Amount of Funding Requested: $46,388

Section I: Project Description:

Describe the project and how the project will to be accomplished. Explain technology that will be used and how this works within your agency's technology architecture and adheres to enterprise wide standards. Describe the investments to be made in infrastructure and services. Explain how the project will fit into your agency and state strategic plan, IT strategic and tactical plan, Governor's leadership agenda, and if appropriate, how the project relates to enterprise wide or multiple agencies' initiatives.

Executive Order 26, directed that, "DAS/ITE shall continue to develop enterprise applications…including the deployment of one-stop shop licensing portal for government service." To that end, ITE has facilitated an expansion of the foundation set in place by the Boards of Dentistry, Medicine, and Nursing, the "Tri-boards", through their adoption of a configurable off-the-shelf online licensing system for their 20,000 licensees.

ITE has assisted four additional agencies, dubbed "Phase 2", to configure additional license categories that bring the total to 50, serving more than 64,000 licensees.

From the onset, the enterprise licensing system has been implemented as a system that aggregates talent, software purchases, and infrastructure resources. Because of the segmented approach of the early adopters, an infrastructure capable of supporting the implementation currently planned is not available. The Tri-boards currently share a set of dedicated servers that cannot meet the needs of the Phase 2 participants. This application seeks funding to implement a robust, expandable infrastructure that would create an Enterprise Licensing Portal that would allow the Tri-boards, Phase 2 participants as well as future adopters to share a common environment. The funding would be used to acquire a full production environment of application and database servers as well as an appropriately sized test environment.

Section II: Expected Results

Describe the benefits to be achieved including impact on citizens, other agencies and department staffs. Include estimates where possible of the number of users and how these users will participate in project development and benefit from its availability.

Describe how project assists agency in meeting any mandates, compliance with technology standards or health, safety or security requirements

Describe how processes within your agency will be affected by the completion of the project. What changes will occur in organization structure, systems, or processes.

In addition to the 7 licensing entities referenced above, three additional agencies encompassing over 15 licensing bodies are in various stages of adopting the licensing portal. If fully realized, this next level of expansion would encompass more than 45,000 additional portal events. These additional adopters will also be supported by the Enterprise Licensing Portal infrastructure. As the enterprise licensing system expands, future adopters will also be added to the environment.

Further, there are economies of scale that benefit the agencies by reducing ongoing costs for individual agencies. As more agencies are added, further reductions in individual agency operating expenses would be realized.

Providing secure online access to license, permit and inspection services allows citizens to conduct business on their schedule and not be restricted by the availability of State staff. In addition, by utilizing a single, unified means for online licensing, citizens encounter a similar experience regardless of the licensing entity.

Supporting this application is an expanded ROI analysis of the enterprise licensing system as it now stands. This shows significant savings by citizens and agency pre- and post-implementation costs.

Section III: Financial Analysis

1. Complete table one as outlined in enclosure one to indicate the estimated costs for acquisition/development and ongoing costs for up to five years where applicable. Indicate approximate share of project that will be funded from various funding sources table two to enclosure one.

All funding for implementation of the Enterprise Licensing Portal infrastructure will be from the Return on Investment Program for FY 2013. Ongoing operating expenses will be borne by participating agencies.

2. Estimated cost reductions to agency from project. Quantify actual state government direct and indirect costs (personnel, support, equipment, etc.) associated with the activity, system or process after project implementation. Describe all cost reductions and how those reductions will be achieved including personnel reductions or deferred hiring, table three of enclosure one.

The proposed infrastructure allows the participants to own their server environment versus payment to ITE of monthly hosting fees. Monthly hosting fees for each agency in a discrete environment would be $2,708; under the proposed system, each agency would pay $1,157÷7 or $165.35 per month for hosting support; a difference of $1,551 per month ;this amount would decrease each time a new participating agency is added.

Direct cost reductions are for each agency's savings from having to provide for a server and associated hosting fees. The Enterprise Licensing Portal eliminates redundancy by sharing a common application server and virtualizing associated databases on a common database server.

3. Other Benefits. Explain other cost reductions or intangible benefits to customers as defined in section II, these expenses may be of a personal or business nature. Discuss Risks of not proceeding with project including loss of other funds, avoidance of penalties or consequences of not complying with enterprise technology standards.

4. Calculate estimated Return On Investment (ROI), table four enclosure one:

Projected Net Benefit to the State of Iowa*:

*This really should be limited to hard cost savings, and not cumulative but individual for each of the years involved.

FY13	FY14	FY15	FY16	FY17
$1,194,362	$1,240,750	$1,240,750	$1,240,750	$1,240,750

Section IV: Auditable Outcome Measures

(Note that Section IV is not used in the scoring of the project)

For each of the following categories, list the auditable metrics for success after implementation and identify how they will be measured.

1. Improved customer service

   Use and maintenance of a single version of the application software on a highly-available infrastructure provides for less downtime and thereby better availability to the customer. In addition, upgrades and troubleshooting are made easier which results in a more consistent user experience.

2. Citizen impact

   Customers will be able to conduct business on their schedule, providing for higher adoption rates. Minimizing operational expenses will allow agencies to reduce the costs that are borne, either directly or indirectly, by consumers.

3. Cost Savings

   Each agency would realize a direct savings of more than $1,551 due to cost reductions resulting from the use of a common, shared infrastructure and software licensing as opposed to the use of servers and infrastructure dedicated to each agency.

4. Project reengineering

   N/A

5. Source of funds (Budget %)

   Agencies may save through reduced monthly fees for hosting services versus shared fees for a portal.

6. Tangible/Intangible benefits

   Ease of support, troubleshooting, updating, versioning in one application server supporting many agencies.

Enclosure One – Financial Analysis

Enclosure One, Financial Analysis Spreadsheet to Return on Investment (ROI) Program Funding Application								
Agency Name:	DAS-ITE							
Application Name:	Enterprise Licensing Portal							
Table One: Estimated Project Cost								
	FY13	FY14	FY15	FY16	FY17			
Development and Implementation Costs	$46,388	$0	$0	$0	$0			
Recuring Costs	$0	$0	$0	$0	$0			
Total Costs	$46,388	$0	$0	$0	$0			
Table Two: Percentage of Costs From								
General Fund								
Federal or other funding								
Pooled Technology Fund	100%	0%	0%	0%	0%			
Table Three: Projected Reduction in Expense								
For Requesting Agency	$0	$0	$0	$0	$0			
For **Citizens of Iowa**	$1,239,200	$1,239,200	$1,239,200	$1,239,200	$1,239,200			
For Other State Agencies								
TOTAL Cost Reductions	$1,240,750	$1,240,750	$1,240,750	$1,240,750	$1,240,750			
Table Four: Calculated Estimated Return on Investment								
Total projected cost from table one	$46,388	$0	$0	$0	$0			
Total projected cost reductions, table three	$1,240,750	$1,240,750	$1,240,750	$1,240,750	$1,240,750			
Projected Net Benefit to the State of Iowa	$1,194,362	$1,240,750	$1,240,750	$1,240,750	$1,240,750			
Cost Worksheet:								
Virtualized Enterprise Application Server - Production and Combination Application/Database Server for Test:								
Stand-alone VMware ESX server								
HP Proliant DL380G7								

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128GB Memory (expandable to 288GB)								
Dual 6-Core 3Ghx Intel Xeon Processors (12-Cores)								
400GB Local disk (Raid5) for ESX and template storage								
Dual SAN HBA								
ILO Remote Console support								
3-year onsite standard warranty								
$13,236.33 EACH								
2 servers: $26,472.66								
Virtualized Enterprise Database Server - Production:								
Production SQL Database Server (Assuming SAN disk used for data)								
HP Proliant DL380G7								
Single 6-Core Intel Xeon 3Ghz								
32GB Memory (expandable to 288GB)								
8X72GB 15K Drives								
Server Hardware: $8,975.94								
Server OS: $485.00								
Microsoft SQL Server 2005 Standard:								
VMWare Licenses								
VMware ESX Licensing								
VMware vSphere 4 Advanced (Priced per processor socket): $1914.09								
Two 2-socket servers: $3828.18								
VMware vSphere 4 Advanced Support/Maintenance for 1Year: $538.09								
Two 2-socket servers: $1076.18	**$41,422**							
Installation and Set-up								
3 - 5 hours of Network Consulting @ $111.65 / hr: $ 334.95 - $ 558.25	$558							
37 - 45 hours of Server Consulting @ $97.96 /hr: $ 3,624.52- $ 4,408.20	$4,408							
Grand Total	**$46,388**	**$0.00**	**$0.00**	**$0.00**	**$0.00**			
Cost Reductions Worksheet:								

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from Combined CostBenefit tab, row 26	$1,239,200	$1,239,200	$1,239,200	$1,239,200	$1,239,200			
Monthly Savings Individual Agency Server vs. Enterprise Server	$1,551	$1,551	$1,551	$1,551	$1,551			
Grand Total	**$1,240,750**	**$1,240,750**	**$1,240,750**	**$1,240,750**	**$1,240,750**			
Enterprise Server Using VMWare					**Individual Agency Server Using Dedicated Hard**			
Description	Quantity	Unit Cost	Extended Cost		Description	Quantity	Unit Cost	Extended C
Virtual Server	4	$217	$868		Server Rack	6	$14	$86
TSM Base Rate	2	$44	$88		Server Farm	6	$139	$836
TSM Usage Rate	25	$0	$5		TSM Base Rate	5	$44	$221
SAN SVC	200	$0	$70		TSM Usage	250	$0	$50
SAN Disk	200	$1	$127		SAN Port	6	$89	$535
					SAN SVC	1000	$0	$348
					SAN Disk	1000	$1	$633
		Total	**$1,157**				**Total**	**$2,708**
This reflects per customer/agency charges					Total Monthly Costs for the Environment			
One Test Application VM					TSM charges are per VM/Server. This starts with 4			
One Test Database VM					Unlimited number of VM's (up to memory/processin			
One Production Application VM					TSM Usage and SAN quantities are estimates only			
One Production Database VM								
TSM for Production VM's only								
TSM Usage and SAN quantities are estimates only. Actual usage will be billed.								
			difference/ month:	**$1,551**				

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lware for AMANDA			
Cost			
VM's and SQL running TSM			
g limits) on test and prod VMWare servers			
Actual usage will be billed.			

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